

Work Order ID 55702

January 28, 2010 9:58:50 AM

Page 1

Item ID: D119-696-043

Accept

Setup Start

Revision ID:

Stop

Item Name: Dual Cargo Mirror Assy

Start Date: 1/29/2010 Start Qty: 4.00

Cust Item ID:

Required Date: 2/8/2010 Req'd Qty: 4.00

Customer:

Reference:

Approvals: Process Plan: MF

Date: 10-1-28 Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3074

A2 UXR

100



Small Fab

Small Fab

Small Fab

Memo

- 1- punch one side
- 2- slide parts in tube
- 3- punch other side
- 4- bend as per dwg D3074
- 5- drill holes as per dwg D3074
- 6- deburr and polish

0.00

0.00

110



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

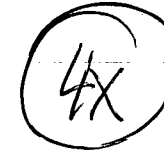
0.00

0.00

OK, ENSURE 0.049 WALL TUBING IS USED QP 10-01-28

M.L. 10/02/05

S. 10/2/05



Ph >



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D119-696-043 PAR #: _____ Fault Category: Small Pals NCR: ☒ Yes No DQA: / Date: 10/23/05
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: _____ Date: _____

NCR: <u>55702</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/02/05	#100	Durking inspection Found that Qty x1 Arm was assembled with a D2054 Bushi Back wavy Back words.	<u>/</u> 10/01/05	→ cut end with single thread hole and use for a D3074-1 Arm. → Scrap left overs.	<u>/</u> 10/01/05		<u>/</u> 10/01/05	<u>S</u> 10/02/05
		R.L. Lacked Attention etc.	<u>/</u> 10/01/05	→ make Have a w/p made up for the D3074-1	<u>/</u> 10/01/05		<u>/</u> 10/01/05	<u>S</u> 10/02/05
		/	<u>/</u> 10/01/05	Scrap # Destr → Scrap Remark Qty at D3074-1 to Rephr according to Part	<u>/</u> 10/01/05	<u>S</u> 10/02/05	<u>/</u> 10/01/05	<u>S</u> 10/02/05

NOTE: Date & initial all entries

Work Order ID 55702

January 28, 2010 9:58:50 AM



Page 2

Item ID: D119-696-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Dual Cargo Mirror Assy

Start Date: 1/29/2010 Start Qty: 4.00



Cust Item ID:

Required Date: 2/8/2010 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

0.00



Small Fab

Small Fab

Memo

0.00

Assemble as per dwg D3074

Small Fab

= 7 Mr. 10/01/08

4X

130

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

5/10/08

46

140

0.00



Identify as per dwg & Stock Location: _____

Packaging

Memo

0.00

Packaging

10-2-17

42 SP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55702

January 28, 2010 9:58:50 AM

Page 3

Item ID: D119-696-043

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Setup Start

Revision ID:

Stop

Item Name: Dual Cargo Mirror Assy

Start Date: 1/29/2010 Start Qty: 4.00

Cust Item ID:

Required Date: 2/8/2010 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

10/02/18 HJ

MF
10-2-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 28, 2010 9:58:49 AM

Page 1

Work Order ID: 55702

Parent Item: D119-696-043

Parent Item Name: Dual Cargo Mirror Assy



Comments: IPP Rev:A 08-02-19 New issue DD verified by: LL

Start Date: 1/29/2010

Required Date: 2/8/2010

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD10 		Purchased	No				Each	0.0000	24.0000			*
Washer D2011-101 		Manufactured	No				Each	39.0000	8.0000			
6" Mirror												

NAS1149D0363J

N113288

24x m-l 10/02/01

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

53992

39

39

Each

23.0000

8.0000

8x m-l 10/02/08

D2054



Bushing

Manufactured No

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST005

53179

23

23

Each

12.0000

8.0000

8x 10/02/04
10/02/01
8x m-l

D2055



Clamp

Manufactured No

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST005

47562

12

12

4x m-l 10/02/01

4x 55726

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 28, 2010 9:58:49 AM

Work Order ID: 55702



Parent Item: D119-696-043



Parent Item Name: Dual Cargo Mirror Assy

Start Date: 1/29/2010

Required Date: 2/8/2010

Comments: IPP Rev:A 08-02-19 New issue LDD verified by: LL

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2056		Manufactured	No				Each	2.0000	4.0000			
-------	--	--------------	----	--	--	--	------	--------	--------	--	--	--



Bell Crank

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST006

2

51429

2

Each

13.0000

4.0000



10-1-29
A55598 ✓ (4x) SP
X

D3072-1		Manufactured	No				Each	13.0000	4.0000			
---------	--	--------------	----	--	--	--	------	---------	--------	--	--	--



Bracket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

13

37635

1

53119 ✓

12

Each

11.0000

4.0000



10/02/01

4x m-h

D3072-2		Manufactured	No				Each	11.0000	4.0000			
---------	--	--------------	----	--	--	--	------	---------	--------	--	--	--



Bracket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

11

37636

1

53120 ✓

10

10/02/01

4x m-h

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector
10.01.28	N/A	ACCEPTABLE TO USE 0.049" WALL 304 TUBE. REF NCR 09-102				CP 10.01.28 per QSI 042	S 01/02/05

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 28, 2010 9:58:49 AM

Work Order ID: 55702

Parent Item: D119-696-043

Parent Item Name: Dual Cargo Mirror Assy

Start Date: 1/29/2010

Required Date: 2/8/2010

Comments: IPP Rev: A1108-02-19 New issue EDD verified by: LL

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

M304TR0.500W.049		Purchased	No				f	86.5100	14.6947			
------------------	--	-----------	----	--	--	--	---	---------	---------	--	--	--



304 RD Tube .500 x .049W

★ SEE W/W
CHG, PREV PAGE

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

MAT

111814

86.5099895

86.5099895

Each

2,943.000 12.0000

14.6947

M-L 10/02/01

MS21042L3

Purchased

No



Nut

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

ST

2943

110844

35

111274

27

111668

52

112314

331

112385

498

113523

300

113537

700

113644

1000

10/02/01

12X M-L

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 28, 2010 9:58:49 AM

Work Order ID: 55702



Parent Item: D119-696-043



Parent Item Name: Dual Cargo Mirror Assy

Start Date: 1/29/2010

Required Date: 2/8/2010

Comments: IPP Rev: A1108-02-19 New issue DD verified by: LL

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039-1-18		Purchased	No				Each	36.0000	12.0000			



Screw

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	36	
110916	36	

110916

10/02/01
12X m-d

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



A	0
AI	0
AZ	0

Technical drawing of a mechanical part, likely a bracket or arm, showing dimensions and tolerances.

Key dimensions and features:

- Overall length: 16.76
- Overall width: 4.05 (REF)
- Overall height: 23.33 (REF)
- Radius: R1.50 (TYP)
- Angle: 51°
- Hole diameter: $\varnothing 0.188$ (TYP 3 PLACES)
- Section line A-A
- Detail view: 78° angle
- Handwritten dimension: 15.924
- Handwritten dimension: 13.921
- Handwritten dimension: 15.184
- Handwritten dimension: 0.640
- Handwritten dimension: 7.506
- Handwritten dimension: 2.25
- Handwritten dimension: 3.56

UNDER REVIEW

03.06.23 *PS*
CHANGE TO 0.049"
WALL THICKNESS

**SECTION B-B
(1 PLACE)**

SECTION A-A
(TYP 2 PLACES)

D3074-1

- 1) PUNCH END PER SPEC CONTROL DRAWING D2727
- 2) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE, $\varnothing 0.50 \times 0.035$ WALL
ENSURE SEAMLESS TUBING IS USED
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) FINISH: POWDER COAT BLACK SANITEX (435.7) PER DART QSI 005 4.3 $\frac{A}{B}$

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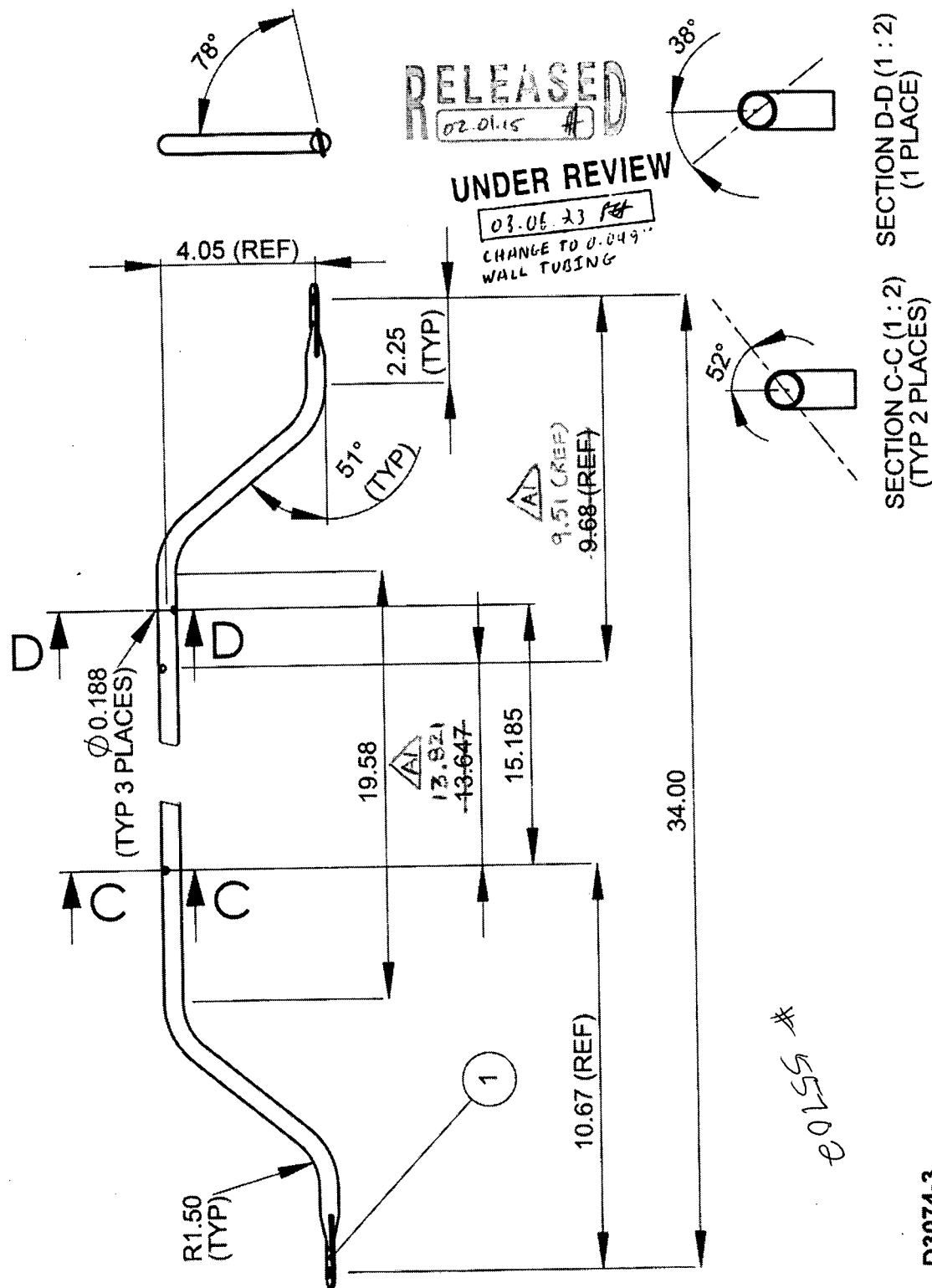
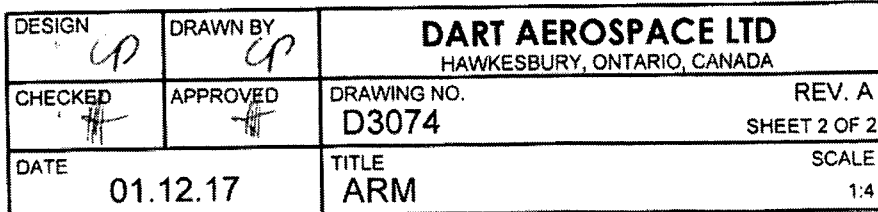
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3074-3

- 1) PUNCH ENDS PER SPEC CONTROL DRAWING D2727
- 2) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE, $\varnothing 0.50 \times 0.035$ WALL
ENSURE SEAMLESS TUBING IS USED
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) PART IS NOT SYMMETRIC

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

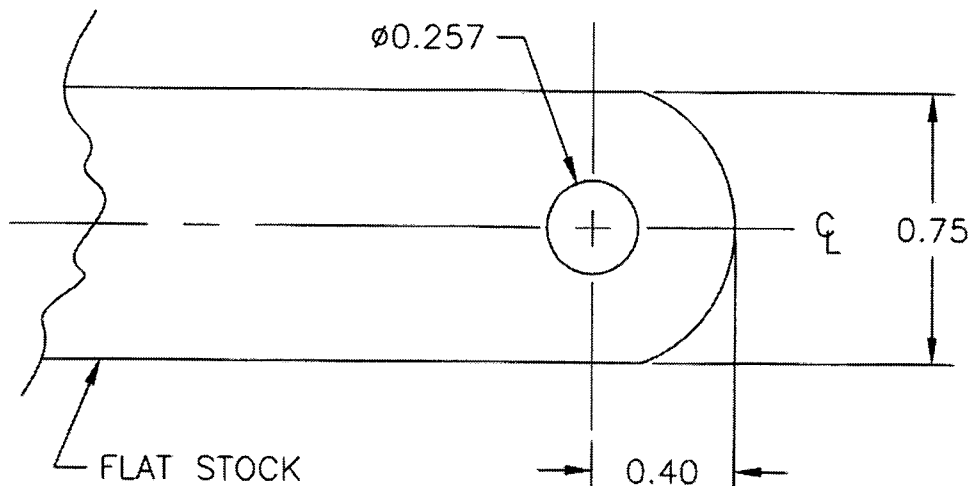
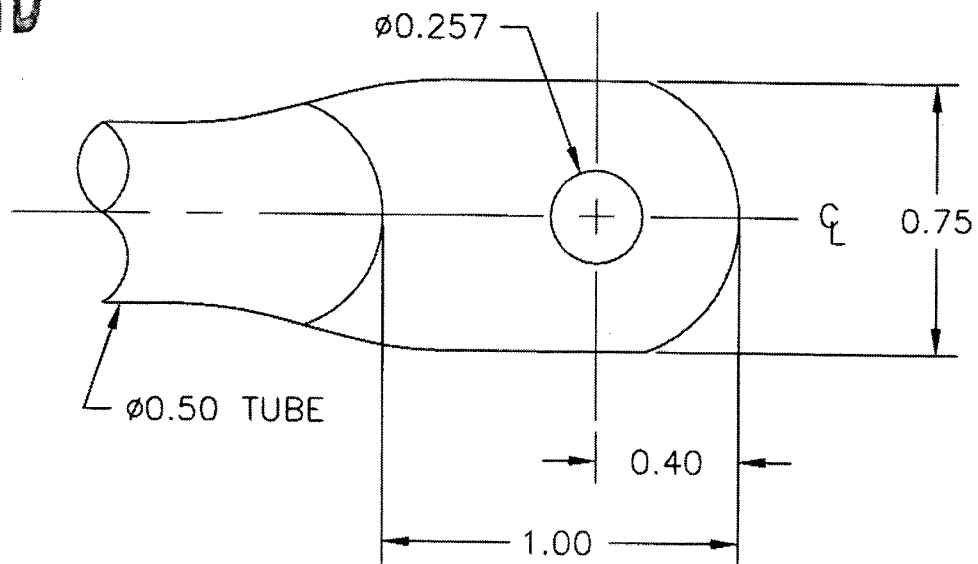
NOTE: Date & initial all entries



DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED DNY	APPROVED CA	DRAWING NO. D2727	REV. A SHEET 1 OF 1
DATE 97.11.24		TITLE PUNCH DT8012 SPEC CONTROL	SCALE 2:1
A	97.11.24	NEW ISSUE	
A1	#ip 01.12.20	ADD TOLERANCE NOTE	

SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

RELEASED
98/03/06 KE



NOTE: TOLERANCES ARE PER DART QSI OIB UNLESS OTHERWISE NOTED.



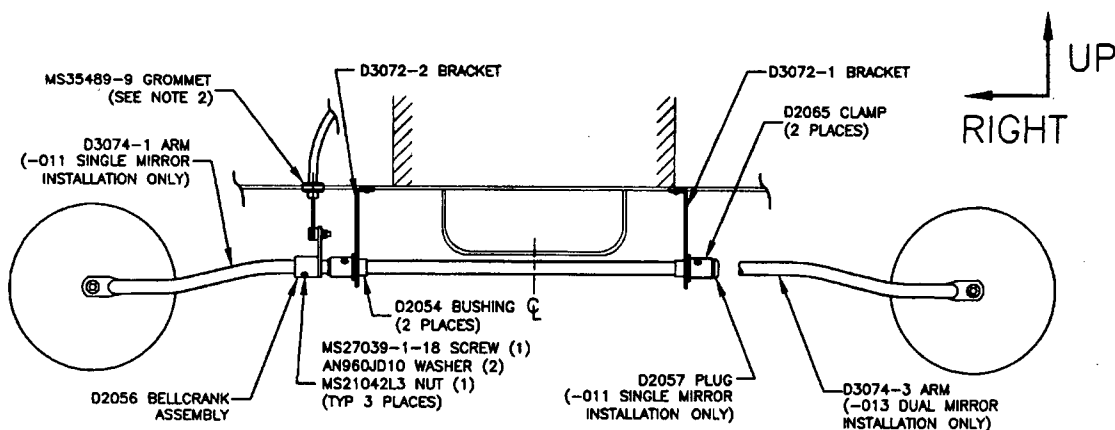


Figure 25-2 – View A: Looking Aft
(D119-696-011/-013 Mirror Shown)

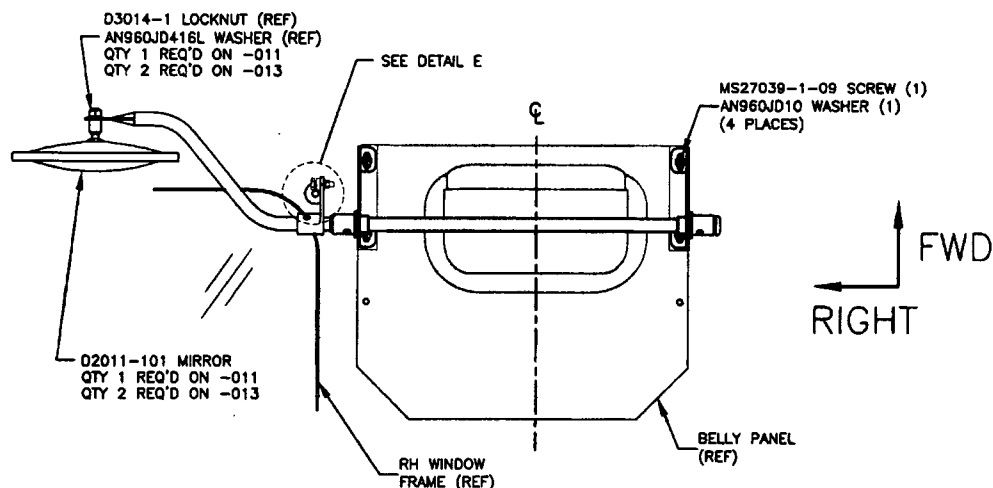


Figure 25-3 – View B: Looking Up
(D119-696-011 Mirror Shown, -013 similar)

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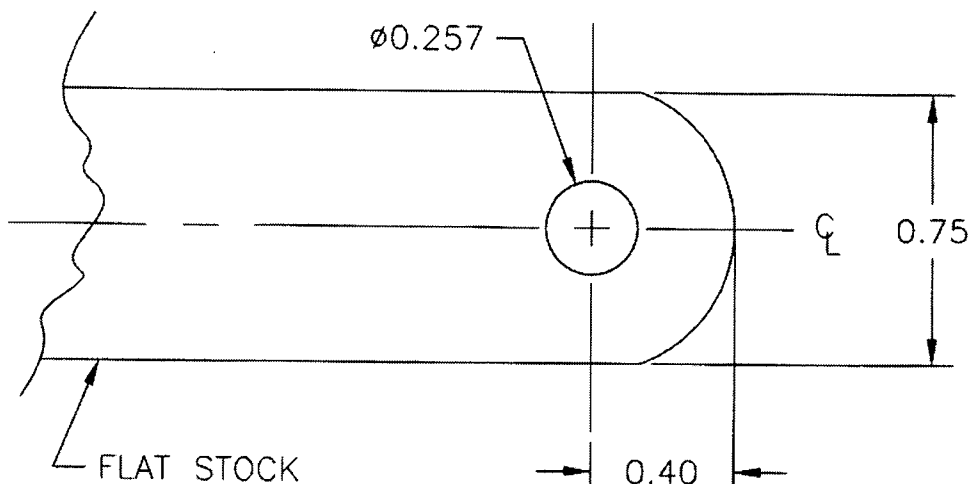
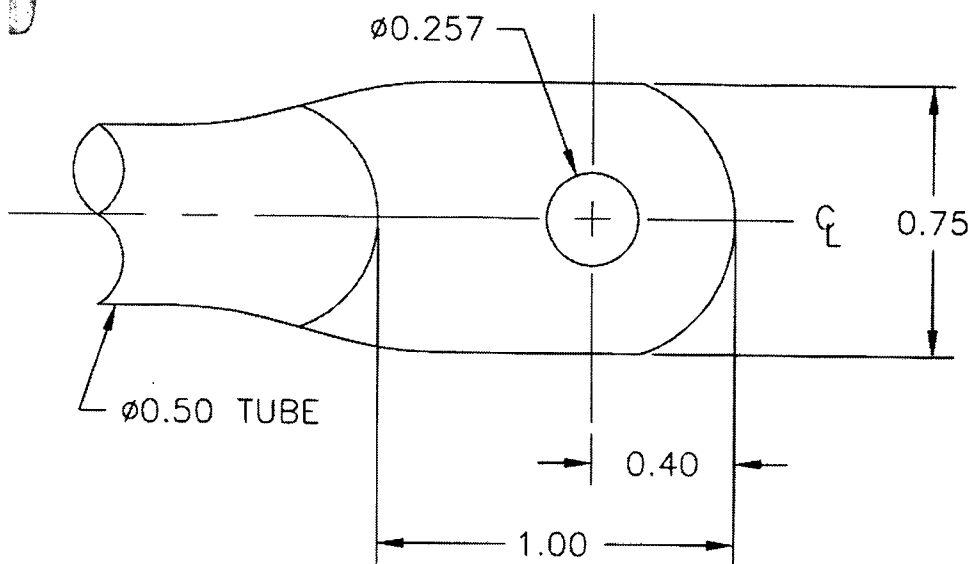


DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED <i>MM</i>	APPROVED <i>CA</i>	DRAWING NO. D2727	REV. A SHEET 1 OF 1
DATE 97.11.24		TITLE PUNCH DT8012 SPEC CONTROL	SCALE 2:1
A	97.11.24	NEW ISSUE	
A1	<i>ACP</i> 01.12.20	ADD TOLERANCE NOTE	

SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

RELEASED
98/03/06 *KE*

*w/10
55702*



NOTE: TOLERANCES ARE PER DART QSI DIB UNLESS OTHERWISE NOTED.

